WHAT IS CLAIMED IS:

1.   A method performed by a data processing system having a memory, comprising the steps of:

inputting a CCFG;

5   inputting an order of the CCFG nodes; and

translating the CCFG into an SCFG by a process that determines context switching prior to execution of the SCFG.

2.   The method of claim 1, wherein each context switch is achieved by adding code that saves a state of a thread being suspended in a state variable and resumes another thread by performing a multiway branch on a state variable for a thread being resumed.

3.   The method of claim 1, wherein the translation of the CCFG into the
15   SCFG produces, for each node of the CCFG, at most one corresponding node in the SCFG.

4.   The method of claim 1, further comprising a topological sort for determining the ACCFG order.

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5.   The method of claim 1, wherein an execution of the SCFG comprises translation of the SCFG into a programming language.

6.   The method of claim 5, wherein the programming language is C.

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7.   The method of claim 1, further comprising a step of translation of the SCFG into a programming language.

8.   The method of claim 7, further comprising a step of executing the
30   programming language translation of the SCFG.

9.   The method of claim 1, wherein an execution of the SCFG comprises interpretation of the SCFG.

5   10.   A data processing system having a memory, comprising the following:
        a sub-system for inputting a CCFG;
        a sub-system for inputting an order of the CCFG nodes; and
        a sub-system for translating the CCFG into an SCFG by a process that determines context switching prior to execution of the SCFG.

11.   A computer program product comprising a computer usable medium having computer readable code embodied therein, the computer program product including:
        computer readable program code devices configured to cause a computer
15   to effect inputting a CCFG;
        computer readable program code devices configured to cause a computer to effect inputting an order of the CCFG nodes; and
        computer readable program code devices configured to cause a computer to effect translating the CCFG into an SCFG by a process that determines
20   context switching prior to execution of the SCFG.

12.   A computer data signal embodied in a carrier wave and representing sequences of instructions which, when executed by a processor, cause performance of steps of:
25   inputting a CCFG;
        inputting an order of the CCFG nodes; and
        translating the CCFG into an SCFG by a process that determines context switching prior to execution of the SCFG.